

By



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,611	10/03/2001	Dwight Poplin	10004192-1	2702

7590 06/02/2005

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EXAMINER

JERABEK, KELLY L

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,611

Applicant(s)

POPLIN, DWIGHT

Examiner

Kelly L. Jerabek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16 and 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 1/5/2005 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments (Amendment page 8) state that capturing a plurality of images at different exposure times does not constitute capturing images using different settings. The Examiner respectfully disagrees. The image sensor (9) disclosed by Norita captures a plurality of images at different exposure times by activating the image sensor (9) after a lapse of time (T_i) and replacing the previous image signal in the buffer memory (82) with the current image signal (page 6, paragraphs 115-118). Therefore, the Examiner is reading this feature as capturing a first image and a second image using different settings (exposure time) of image-capturing parameters as recited in claim 1.

Applicant's arguments (Amendment page 9) state that the Norita reference does not disclose the element of "adjusting current settings of the image-capturing parameters of the image-capturing device to conform with one of the first and second

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images selected by a user". The Examiner respectfully disagrees. Norita states that the exposure settings of the camera are changed for each exposure time in order to obtain images of varying exposure (page 6, paragraphs 118-119). Therefore, the current settings of the image capturing parameters are adjusted for each image that is written to the buffer memory (82). If the user presses the release button (30), the process goes on to step 45 and the exposure is not further changed (page 6, paragraphs 120-121). **Since when the release button is pressed the exposure time is not further changed (and the exposure time is changed otherwise) the Examiner is reading this feature as "adjusting current settings (corresponding to not changing the exposure time) of the image-capturing parameters of the image-capturing device"**. Therefore, the current settings of the image capturing parameters remain the same when an image is selected by a user. Thus, the settings conform with the image selected by the user.

Applicant's arguments (Amendment pages 9-10) state that the Norita reference does not disclose " a step of capturing a third image using the current setting of the image-capturing parameters as the settings to produce the third image". The Examiner respectfully disagrees. Norita states that by repetition of the loop of figure 9 (ST 42a - ST 43) images corresponding to a plurality of exposure times are captured in order to sequentially display images brighter than the previously displayed image (page 6, paragraph 119). However, if the user presses the release button (30), the process goes on to step 45 and the exposure is not further changed (page 6, paragraphs 120-121).

Therefore, it can be seen that image captured in steps ST45-ST48 will be captured using the current settings of the image-capturing parameters (exposure time) to produce an image. Thus, it can be seen that if the release button (30) is pressed when a second image according to the sequence (ST42a-ST43) is displayed a third image is captured using the current settings (exposure time of the previous image) of the image-capturing parameters to conform the second image.

Applicant's arguments with respect to claims 19 and 22-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10-16, 18 and 20-21 rejected under 35 U.S.C. 102(e) as being anticipated by Norita et al. US 2004/0169767.

Re claim 1, Norita discloses in figure 9 a flow chart of the operation of manual exposure photography of a digital camera. The camera includes an image sensor (9) for obtaining image signals and a buffer memory (82) for storing the signals (page 6, paragraphs 114-115). The image sensor (9) captures a plurality of images at different exposure times by activating the image sensor (9) after a lapse of time (T_i) and replacing the previous image signal in the buffer memory (82) with the current image signal (page 6, paragraphs 115-118). Therefore, a first image and a second image are captured using different settings of image-capturing parameters (exposure settings). Each of the images corresponding to a different exposure setting is displayed on an LCD (51), and when an image with desired exposure is displayed on the LCD (51) a user selects that image by pressing a release button (30) (page 6, paragraphs 119-120). Therefore, the first and second images corresponding to different exposure settings are displayed as comparison images for user selection. The exposure settings of the camera are changed for each exposure time in order to obtain images of varying exposure (page 6, paragraphs 118-119). Therefore, the current settings of the image capturing parameters (exposure time) are adjusted for each image that is written to the buffer memory (82). If the user presses the release button (30), the process goes on to step 45 and the exposure is not further changed (page 6, paragraphs 120-121). Since when the release button is pressed the exposure time is not further changed (and the exposure time is changed otherwise) the Examiner is reading this feature as adjusting current settings (corresponding to not changing the exposure time) of the image-capturing parameters of the image-capturing device. Therefore, the current settings of

the image capturing parameters remain the same when an image is selected by a user. Thus, the settings conform with the image selected by the user.

Re claim 2, the camera disclosed by Norita includes a signal processor (11) for processing and storing raw image data of a captured scene of interest (page 6, paragraph 115). Also, a plurality of images is captured corresponding to a plurality of exposure times (page 6, paragraph 119). Therefore, raw image data of a first image using a first setting of an image-capturing parameter (low exposure) and raw image data of a second image using a second setting of an image-capturing parameter (high exposure) is processed by the processor (11).

Re claim 3, Norita states that images of increasing exposure are sequentially captured and displayed (page 6, paragraph 119). Therefore, first and second images are captured sequentially using different settings of an image-capturing parameter (exposure times).

Re claim 4, Norita states that images are captured with different exposure settings (page 6, paragraphs 114-119). Therefore, the selected image-capturing parameter includes the exposure period.

Re claim 5, see claim 4.

Re claim 6, Norita states that the LCD (51) can display images either in sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first and second images corresponding to different exposure settings may be simultaneously displayed.

Re claim 7, Norita states that the LCD (51) can display images either in sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first and second images corresponding to different exposure settings may be sequentially displayed.

Re claim 8, Norita states that by repetition of the loop of figure 9 (ST 42a - ST 43) images corresponding to a plurality of exposure times are captured in order to sequentially display images brighter than the previously displayed image (page 6, paragraph 119). However, if the user presses the release button (30), the process goes on to step 45 and the exposure is not further changed (page 6, paragraphs 120-121). Therefore, it can be seen that image captured in steps ST45-ST48 will be captured using the current settings of the image-capturing parameters (exposure time) to produce an image. Thus, it can be seen that if the release button (30) is pressed when a second image according to the sequence (ST42a-ST43) is displayed a third image is captured using the current settings (exposure time of the previous image) of the image-capturing parameters to conform the second image.

Re claim 10, see claim 1.

Re claim 11, see claim 2.

Re claim 12, see claim 3.

Re claim 13, see claim 4.

Re claim 14, see claim 5.

Re claim 15, see claim 6.

Re claim 16, see claim 7.

Re claim 18, Norita discloses in figure 9 a flow chart of the operation of manual exposure photography of a digital camera. The camera includes an image sensor (9) for obtaining image signals and a signal processor (11) for processing and storing raw image data of a captured scene of interest (page 6, paragraphs 114-115). Also, a plurality of images is captured corresponding to a plurality of exposure times (page 6, paragraph 119). Therefore, raw image data of a first image using a first setting of an image-capturing parameter (low exposure) and raw image data of a second image using a second setting of an image-capturing parameter (high exposure) is processed

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by the processor (11). The image sensor (9) captures a plurality of images at different exposure times by activating the image sensor (9) after a lapse of time (T_i) and replacing the previous image signal in a buffer memory (82) with the current image signal (page 6, paragraphs 115-118). Therefore, a first image and a second image are captured using different settings of image-capturing parameters (exposure settings). Each of the images corresponding to a different exposure setting is displayed on an LCD (51), and when an image with desired exposure is displayed on the LCD (51) a user selects that image by pressing a release button (30) (page 6, paragraphs 119-120). Therefore, the first and second images corresponding to different exposure settings are displayed as comparison images for user selection. The exposure settings of the camera are changed for each exposure time in order to obtain images of varying exposure (page 6, paragraphs 118-119). Therefore, the current settings of the image capturing parameters (exposure settings) are adjusted for each image that is written to the buffer memory (82). If the user presses the release button (30), the process goes on to step 45 and the exposure is not further changed (page 6, paragraphs 120-121). Since when the release button is pressed the exposure time is not further changed (and the exposure time is changed otherwise) the Examiner is reading this feature as adjusting current settings (corresponding to not changing the exposure time) of the image-capturing parameters of the image-capturing device. Therefore, the current settings of the image capturing parameters remain the same when an image is selected by a user. Thus, the settings conform with the image selected by the user.

Re claim 20, Norita states that the LCD (51) can display images either in sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first and second images corresponding to different exposure settings may be simultaneously displayed.

Re claim 21, Norita states that the LCD (51) can display images either in sequence or in parallel after photo shooting (page 6, paragraph 124). Therefore, first and second images corresponding to different exposure settings may be sequentially displayed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 22-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Norita et al.

Re claim 19, Norita discloses all of the limitations of claim 18 above. Additionally, Norita states that images of increasing exposure are sequentially captured

and displayed in order sequentially display a brighter image than the previous one (page 6, paragraph 119). Therefore, image-capturing parameters include changing the brightness of the image as a result of changing the exposure period. However, the camera disclosed by Norita does not disclose further image-capturing parameters such as gamma correction and white balance.

Usami discloses in figure 2 a color video camera that converts color components of an object into electronic image signals. A microcomputer (7) adjusts white balance by adjusting gains of amplifiers (5R,5B), adjusts contrast by adjusting knee circuits (6R,6G,6B), and adjusts exposure state by adjusting the iris of the optical system (2) and exposure times of the CCD (col. 7, lines 30-67). Thus, the white-balance of an image signal changes in accordance with the exposure of the image signal. Therefore, it would have been obvious for one skilled in the art to have been motivated to include the capability of converting color components of an object into electronic image signals as disclosed by Usami in the digital camera disclosed by Norita. Doing so would provide a means for capturing color image signals of an object (Usami: col. 3, lines 1-7).

Re claims 22-23, Norita discloses all of the limitations of claims 1 and 10 above. Additionally, Norita states that images of increasing exposure are sequentially captured and displayed in order sequentially display a brighter image than the previous one (page 6, paragraph 119). Therefore, image-capturing parameters include changing the brightness of the image as a result of changing the exposure period. However, the

camera disclosed by Norita does not disclose further image-capturing parameters such as gamma correction and white balance.

Usami discloses in figure 2 a color video camera that converts color components of an object into electronic image signals. A microcomputer (7) adjusts white balance by adjusting gains of amplifiers (5R,5B), adjusts contrast by adjusting knee circuits (6R,6G,6B), and adjusts exposure state by adjusting the iris of the optical system (2) and exposure times of the CCD (col. 7, lines 30-67). Thus, the white-balance of an image signal changes in accordance with the exposure of the image signal. Therefore, it would have been obvious for one skilled in the art to have been motivated to include the capability of converting color components of an object into electronic image signals as disclosed by Usami in the digital camera disclosed by Norita. Doing so would provide a means for capturing color image signals of an object (Usami: col. 3, lines 1-7).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

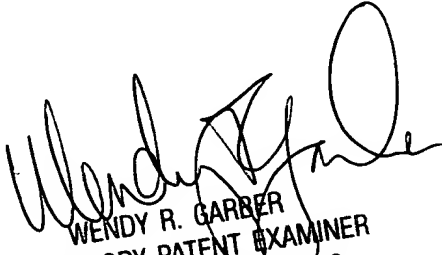
Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on **(571) 272-7308**. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ


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